



## What is "social acceptance" of technologies

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# What is "social acceptance" of technologies



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**Key note for:**

**Danish Wind Power Research 2013**

**Arranged by the Danish Research Consortium for Wind Energy**

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If the US representatives neglect the complexity in the Europeans worries towards GM foods it can lead to negative consequences in the application of the technology

Borch et al. 2003

The closed process gives rise to problems and therefore concerned citizens and organizations are legally incapacitated, which means that the ministry's arguments about the necessity of locating the test center in Østerild will not be recognized

Borch 2010



# NIMBY!?

## Not In My Back Yard



NIMBY theory assumes that for selfish and irrational, reasons people are willfully and ignorantly preventing the siting of necessary developments in the local vicinity.

However!

In contrast to the NIMBY theory, studies from around the world have found that opponents tend not to be stupid, selfish or stubbornly ignoring the public good. Hagget 2011



People often oppose technology artifacts on the basis of detailed knowledge of their area, the development, and the issue more generally. Hagget 2011

National public interest for wind power does not necessarily translate to a local public interest. (Bergek, 2010)



Social acceptance  $\neq$  Local acceptance



## Important reasons for support or opposition

1. The ascribed aesthetic value of the particular landscape
2. The emotional attachment that people have to the place
3. Fears of impacts on the local environment and economy
4. Sustainability (wind power is dependent on subsidies)
5. The ownership of a development, and locals relationships with developers
6. The decision making processes, trust in decision-makers, and opportunities for the locals



### Visual impact:

Turbines have an inescapable visual impact in an “otherwise structure less landscape”; just as famously the white cliffs of Dover can be seen from Calais, a distance of 30 km

(Henderson , 2002)

### Noise:

How can wind turbine noise both be “unbearable” and “undetectable”?

- Difficulties in measuring noise
- Disagreement about the type of noise
- The subjective assessment and receipt of noise

(Haggett , 2012)





## Emotions:

Each location is different, and people will feel differently about it and any plans for change (Devine-Wright and Howes, 2010)

An aerial photograph of a coastal area. In the foreground, a large body of water is filled with numerous white offshore wind turbines. In the background, a coastline is visible with two towns labeled: Colwyn Bay on the left and Llandudno on the right. Two black speech bubbles with white text are overlaid on the image. The left bubble points towards the Colwyn Bay area, and the right bubble points towards the Llandudno area.

Colwyn Bay

Llandudno

“run down”  
“dying”  
“forgotten”

“famed Victorian seaside town”  
“booming tourist industry”  
“renowned beauty spots”



## Impact on local environment:

- Harm to the local environment (Ladenburg et al. 2006)
- Impact on birds and sealife (Jay, 2010)
- Local fishing industry (Firestone et al., 2009)
- Recreational activities (Firestone & Kempton, 2007)
- Loss of tourist income (Devine-Wright & Howes, 2010)

## Sustainability:

- Wind resources
- Grid connections/capacity
- Spatial planning (Power & Cowell, 2010)





## Relationships with outsiders :

Locally based community groups developing wind farms are met with less opposition than distant, faceless, multi-national corporations (Gross, 2007;

Jobert et al., 2007; van der Horst, 2007; Wong, 2009; Haggett, 2008)

Often people are not against turbines per se, but are primarily against the people who want to build them (Wolsink, 1996)

“Your own pigs don’t smell”



### Planning and participation:

If people feel that the processes for considering an onshore wind farm are fair, they are more likely to support the outcome of those processes (Gross, 2007)

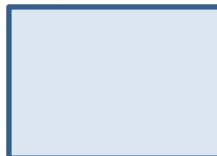
While public involvement is very challenging it is highly recommended: “if a sense of control is created through an open and dynamic process, the confidence of the public may be achieved” (Soerensen et al. 2002).

Vicedirektøren

J.nr.

Ref. jac

Den 30.09.2009



#### Invitation til informationsmøde for lodsejere

Regeringen har besluttet at placere et nyt nationalt testcenter for hav- og landvindmøller i Østerild Klitplantage.

Din ejendom beliggende Bredlundvej 22 og 32, 7741 Frøstrup ligger inden for det påtænkte projekts beregnede støjkonsekvenszone på 44 dB, og vil derfor i givet fald blive særlig berørt. Din ejendom vil formentlig vil blive ubeboelig, såfremt testcenteret skal anlægges. Det kan derfor betyde, at staten vil starte en proces for overtagelse af ejendomme i støjkonsekvenszonen på 44 dB.

For at sikre en god dialog og proces for den enkelte lodsejer, vil vi gerne invitere dig til et informationsmøde for alle berørte lodsejere torsdag den 8. oktober 2009 kl. 17:00 i Multihallen i Østerild.

Endvidere sender vi dig en invitation til et offentligt møde den 8. oktober 2009 kl. 18:30 i Multihallen i Østerild

Der vedlægges et ideoplæg, som er i offentlig høring indtil den 19. oktober 2009. Du har i denne høringsfase mulighed for at komme med ideer, forslag og kommentarer til det videre arbejde. Du kan læse mere om ideoplæg og testcenter på By- og Landskabsstyrelsens hjemmeside på [www.blst.dk](http://www.blst.dk).

Har du spørgsmål om informationsmødet og den kommende proces er du velkommen til at kontakte Skov- og Naturstyrelsen i Thy på tlf. 97 97 70 88.

Med venlig hilsen

Sven Koefoed-Hansen

## Invitation to information meeting for land owners

30. September 2009

The government has decided to place a national test center for off- shore and land based wind turbines in Østerild Plantation.

Your property is placed inside the planned projects calculated noise consequence zone of 44 dB, and will therefore be affected if the project is implemented. Your property may no longer be habitable if the test center is established. Therefore the state will initiate a process to takeover properties inside the noise consequence zone of 44 dB.

To secure a sound dialogue for the individual property owner, we would like to invite you to information meeting for all effected land owners Thursday 8. October 2009 17:00 in Multihallen in Østerild.

Moreover, we will send you an invitation to a public meeting 8. October 2009 18:30 in Multihallen in Østerild.

Attached please find a catalogue of ideas which is in public hearing until the 19. October 2009. During the hearing phase you are given the opportunity to come up with ideas, suggestions and comments for the further project development. You can read more about the catalogue of ideas and the test center here: [www.blst.dk](http://www.blst.dk).

If you have any question regarding the information meeting please contact the Forest and Nature agency in Thy: Phone number 97 97 70 88.

Yours sincerely

Sven Koefoed-Hansen







Østerild – what went wrong?

- Closed process excluding powerful actors such as locals and NGO's  
→ Lack of ownership among locals
- Inadequate environmental impact assessment (EIA performed in 3 mth. And with no alternative locations assessed)  
→ Lack of trust
- Clumsy communication on an emotional issue  
→ Anger and resistance

# How to approach potential conflicts E.g. Hahn, 2008

## **Instrumental**

Tangible issues like methods, procedures e.g. EIA  
Approach: Problem solving to find a the “best” solution

## **Interests**

Allocation of resources like money & space  
Approach: Negotiation to find an agreement – give locals  
a say and a bite of the cake

## **Values**

Political and esthetic values  
Approach: Dialogue to reach mutual understanding

## **Personal**

Identity, emotional attachment  
Approach: Dialogue to reach mutual understanding





Empowerment



Recognition



Thank you